

2025 Pelham Distribution System Municipal Summary Report



Pelham Distribution System

Town of Pelham

2025 Municipal Summary Report

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2025

Municipal Drinking Water License # 072-101

Municipal Water Works Permit # 072-201

1. Purpose

This report was prepared by the Director of Public Works and Manager of Public Works for the Owner of the Pelham Distribution System, the Corporation of the Town of Pelham, to be presented to Council.

As legislated, Council is responsible as the Owner of the water system for ensuring these reports are prepared and available to the public each year.

To enhance the communication and understanding of these reports, this Municipal Summary Report contains additional non-legislated information on the drinking water system operations and water quality.

2. System Overview

The provision of drinking water for residents in the Niagara Region is a responsibility shared between two tiers of municipal government. The Niagara Region is responsible for the treatment and supply of water to the Town of Pelham via transmission mains. The Town of Pelham is responsible for distributing water to local consumers through its own distribution network of pipes.

The Pelham Distribution System is a Class 2 water distribution subsystem. The system consists of approximately 86 km of watermains, varying in diameter from 50mm to 400mm, providing water to approximately 14,025 residents through 5,664 accounts within the general urban area.

3. Water Quality Testing

Ontario Regulation 170/03 prescribes water quality testing requirements for municipal drinking water systems.

In 2012, the Town of Pelham qualified for an exemption from collecting lead samples from residential or non-residential plumbing under the community lead testing program; however, reduced sampling must still take place in four locations within the distribution system. As such, the Town has continued with its lead testing program in the distribution system, with no concerns.

The Town carried out testing in **2025** as prescribed by legislation.

In addition to the prescribed sampling, the Town tested for water quality in response to complaints from consumers. Complaints generally refer to colour, odour, pressure, particulate, supply and/or taste.

The Town responded to **14** water quality/supply complaints in **2025**. Six were related to low pressure, 5 to water colour, and three to odour. All were resolved promptly.

4. Summary of Non-Compliance

The Town of Pelham Distribution System was operated in such a way that at no time did it fail to meet or exceed the requirements of the Safe Drinking Water Act, associated regulations, the system's approval or any order that may have been issued for this reporting period.

5. MECP Drinking Water System Inspection Report

The Town of Pelham Distribution System was granted a 100% inspection rating during the **2025** Ministry of Environment, Conservation and Parks annual drinking water system inspection.

The Pelham Distribution System Inspection Report is included as an attachment to Public Works Council Report 2026-0037 – 2025 Pelham Water Distribution System Summary Report.

6. Flow Data

Bulk treated water supplied to the Town of Pelham is measured by the Niagara Region and provided monthly to the Town. In **2025**, the total volume of treated drinking water supply was 1,673,320 cubic meters (m³).

The Town of Pelham's accounted water use, which includes metered revenue water and non-revenue water, totalled 1,347,901 m³. The total volume of unaccounted for water was 285,736 m³. Water loss is the difference between the total flow input and the accounted-for water volume, shown as a percentage. In **2025**, the Town of Pelham's water loss was 17%.

Table 2 – Annual Volume of Treated Water Supplied by the Region of Niagara

Table 2 – Annual Treated Water Supply	
Year	Supply (m³)
2015	1,364,450
2016	1,410,410
2017	1,122,740
2018	1,243,900
2019	1,150,570

2020	1,473,630
2021	1,584,270
2022	1,509,890
2023	1,494,110
2024	1,533,320
2025	1,673,320

The Town’s Drinking Water License does not limit the demand for flows to the Town, so a comparison to license limits is not required. The average daily consumption is shown in **Table 3**, along with the maximum daily flow for each month.

Table 3 – Daily Water Consumption

Table 3 – Daily Water Consumption		
Month	Average Daily Flow (m³)	Maximum Flow in One Day (m³)
January	3660	4280
February	3750	4490
March	3700	4160
April	3660	4150
May	4340	5300
June	6610	9280
July	6830	8460
August	6430	9180
September	5060	6800
October	3700	4860
November	3440	4290
December	3770	4340

The highest-demand day occurred in June, which aligns with the typical summer high monthly demand.

No servicing concerns are noted. The Niagara Regional Master Servicing Plan (MSP) lists the firm capacity of the Shoalts Drive Reservoir to be 19,400 m³/day. The MSP has identified future projects, including the replacement of the Pelham Elevated Water Tank and increased pumping capacity at the Shoalts Drive Reservoir to accommodate projected 2041 servicing needs. These projects, which are currently in the design phase, are being undertaken by the Regional Municipality of Niagara.

7. Municipal Drinking Water Licensing Program

The Municipal Drinking Water Licensing Program is a five-stage initiative by the MECP under the Safe Drinking Water Act, 2002. The Town of Pelham maintains its Certificate of Accreditation as an Operating Authority for its water distribution system, and the system license and permit(s) are in place. **Table 4** lists the status of the key elements for water licensing.

Table 4 – Municipal Drinking Water Licensing Program Status

Table 4 – Municipal Drinking Water Licensing Program Status	
Program	Status
License #072-101	Expires June 16 th , 2029
Permit #072-201	Active and current – No expiry
Operational Plan	Endorsed by Council March 21, 2021
Accreditation	Maintains full accreditation. Expires April 29 th , 2027
Financial Plan	Updated in 2023, covering 2024 – 2029 inclusive

Infrastructure Review Summary
<div style="display: flex; justify-content: space-between;"> Revision #03 Document #QMS FORM 026 </div>

The Corporation of the Town of Pelham Drinking Water Distribution System	
Meeting Location:	Tice Road Operations Centre
Date / Time:	10 April 2025, 12:00 – 1:30pm
Attendees:	Jason Marr (DPW, Ryan Cook (MPW), Dave Vaccaro (SWW), Sydney Van Leeuwen (Environmental Compliance Analyst [ECA]), Engineering Technologists Gimuel Ledesma and Anthony LaSelva
Minutes Recorded by:	Sandra Tavares (Facilitator, <i>Tavares Group Consulting Inc.</i>)
Minutes to be distributed to:	DPW, MPW, SWW, ECA

Infrastructure Review Meeting Minutes	
Details / Discussion Points / Issues Identified	Recommendation (for budget ask) / Action Items (tracked via QMS LIST 006)
Outcomes of the Risk Assessment (check what applies): <input type="checkbox"/> 12-month annual <input checked="" type="checkbox"/> 24-month annual <input type="checkbox"/> 36-month reassess	
Reviewed, discussed and confirmed the 10-Apr-2025 Risk Assessment Review Meeting results including Town of Pelham's Critical Control Point (CCP), loss of chlorine residual , and associated Critical Control Limit (CCL = 0.20 mg/L after routine flush) and associated processes in place to maintain chlorine residuals (i.e., Spring/Fall and watermain flushing confirmed by SWW as mid April start date with form updates reviewed as part of 10-Apr-2025 DWQMS Awareness training) and monitoring through weekly distribution system Cl ₂ sampling, including recent 2024 tracking in the Appendix below with no issues identified or actions to be taken.	No additional recommendations or action items.
Watermain – servicing, replacement, monitoring, operating & capital needs, other	
<ul style="list-style-type: none"> • 2024-2029 Approved Water [Capital] Budget with the 2025 Capital Budget online: <ul style="list-style-type: none"> – Cast iron replacement (e.g., W01-23 Line Avenue 2024 referral [2025 part of Quaker Road] and Niagara Region contract watermain addition, grant-funded WTR-01-24 Quaker Road [2025] and -02-24 Dale [Pinecrest completed in 2024 	OVERDUE 2024-AI-07 MPW to ensure 2025 Effingham PRV replacement is included in 2024 capital budget planning has been postponed to 2025 as per DPW (\$12K).

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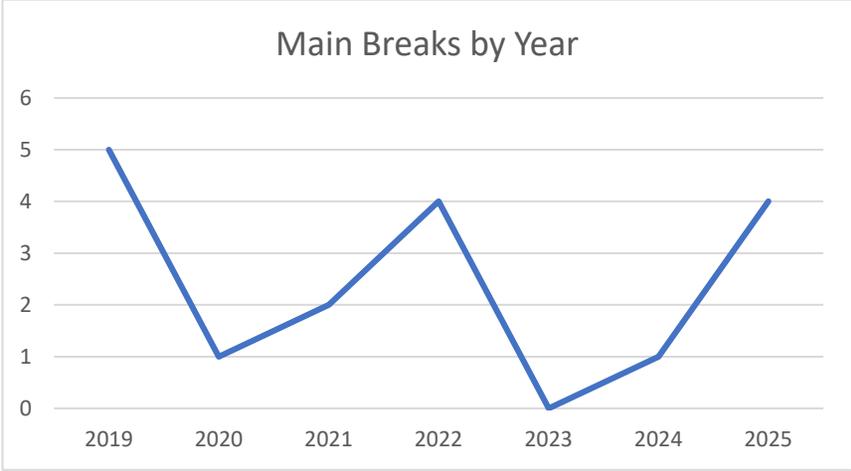
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Infrastructure Review Meeting Minutes	
Details / Discussion Points / Issues Identified	Recommendation (for budget ask) / Action Items (tracked via QMS LIST 006)
<p>with Moote Lane short section in 2025, 2027 Emmett St. is now scheduled for 2028 700291 with 300638 design in 2025 College St. to be complete with Emmett – design in 2025 and construction 2028])</p> <ul style="list-style-type: none"> - Original 2030 cast iron replacement timeline has been extended to 2034, as per DPW with 700308 - Watermain Replacement - cast iron replacement prog \$400K scheduled for 2028; 6 cast iron projects left • 10-Year Capital Plan Review endorsed by Council in 2024 as per DPW and reflected in the reviewed, revised and approved QMS PROC 014 Review and Provision of Infrastructure to replace reference to 20-Year Capital Plan • Operating budget items followed up from 2024: <ul style="list-style-type: none"> - PRV maintenance 5-year maintenance mostly completed in 2024 (7 Brock St. done in 2021 and 3 Hwy 20 and Park Lane incomplete to be replaced as part of Canboro-Pelham with 4 Effingham (5 Year in 2024)?) with annual due Fall 2025 (with contractor recommendations) - Annual W02-23 \$30K fittings replacement now part of operating budgets • No unplanned road reconstruction needs with water involved as per MPW and DPW • Break histories to date as per 'Current Combined Water Ops 2015 onward spreadsheet' 'Watermain Break Summary' tab: 	

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Infrastructure Review Meeting Minutes		Recommendation <i>(for budget ask) / Action Items</i> <i>(tracked via QMS LIST 006)</i>																										
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<div style="text-align: center; margin-bottom: 10px;"> <h4>Main Breaks by Year</h4>  </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr style="background-color: #cccccc;"> <th style="text-align: left;">Year</th> <th style="text-align: center;"># of Breaks</th> <th style="text-align: left;">Comments</th> </tr> </thead> <tbody> <tr><td>2018</td><td style="text-align: center;">9</td><td></td></tr> <tr><td>2019</td><td style="text-align: center;">13</td><td>5 contractor- and 2 ageing-related, 5 cast iron</td></tr> <tr><td>2020</td><td style="text-align: center;">12</td><td>6 contractor-related, 6 cast iron</td></tr> <tr><td>2021</td><td style="text-align: center;">2</td><td>due to age / cast iron</td></tr> <tr><td>2022</td><td style="text-align: center;">4</td><td>150mm cast, older pipes</td></tr> <tr><td>2023</td><td style="text-align: center;">0</td><td></td></tr> <tr><td>2024</td><td style="text-align: center;">1</td><td>7-Feb Orchard Place 150mm cast, older pipes</td></tr> <tr><td>2025 YTD</td><td style="text-align: center;">4</td><td>18-Jan Mayfair at Chestnut, 25-Jan Lorimer (2032 700280 capital) and Lyndhurst and 10-Mar Emmett (700291 2028), all cast iron and may be due to cold weather</td></tr> </tbody> </table> <p><i>*Replacement dependent on funding/reserves, wastewater, and roads needs.</i></p>	Year	# of Breaks	Comments	2018	9		2019	13	5 contractor- and 2 ageing-related, 5 cast iron	2020	12	6 contractor-related, 6 cast iron	2021	2	due to age / cast iron	2022	4	150mm cast, older pipes	2023	0		2024	1	7-Feb Orchard Place 150mm cast, older pipes	2025 YTD	4	18-Jan Mayfair at Chestnut, 25-Jan Lorimer (2032 700280 capital) and Lyndhurst and 10-Mar Emmett (700291 2028), all cast iron and may be due to cold weather	
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Details / Discussion Points / Issues Identified	Recommendation (for budget ask) / Action Items (tracked via QMS LIST 006)
Hydrants – monitoring, servicing, operating & capital needs, other	
Semi-annual dead end blow off flushing is completed in the Spring and Fall with NEW Dead-End Blow-Off Flushing QMS LIST 004 as a result of Internal Audit IN PROGRESS 2024-OFI-41 leading to 2023-OFI-33 iv use of previous QMS FORM 001 correct revision COMPLETION.	
Main valves – monitoring, servicing, operating & capital needs, other	
<ul style="list-style-type: none"> • ‘Current Combined Water Ops 2015 onward spreadsheet’ ‘Maintenance Activities’ tab identifies valve maintenance taking place; Q3 Nov-2024 (some completed in 2025 and mechanical repairs Feb/Mar-2024) and Q4 planned for 2025 • 2022-OFI-25 to ensure all valves have been addressed as part of the maintenance program is COMPLETE with COMPLETE 2023-OFI-33 (referenced in ‘Hydrants’ section above) for additional work required pertaining to document control as well as 2024-OFI-41 although valve and hydrant update issues persist until new Work Management System (WMS) in place. 	
Other appurtenances – operating & capital budget needs, other	
<ul style="list-style-type: none"> • Bulk Station \$60K replacement to be used for software instead as per MPW • Water meter program based on replacement upon request by Water Billing Clerk with data maintained by Corporate Services has Phase 1-3 scheduled for 2029 through 2031 as per capital budget which may be pushed out as per DPW and last completed 2011 as per ECA 	
Inventory and Tools – operating & capital needs, other	
<ul style="list-style-type: none"> • No additional requirements since 2 Colorimeters (4 in total) were replaced in 2019 	
	IN PROGRESS 2023-AI-06 to document Hydrant Flow Tester process (e.g., used every 5 years) in existing QMS SOP 002, LIST 003 and NEW FORM 007 communicated to Operator today as part of the DWQMS Operator training with external maintenance budget to be discussed with Fire

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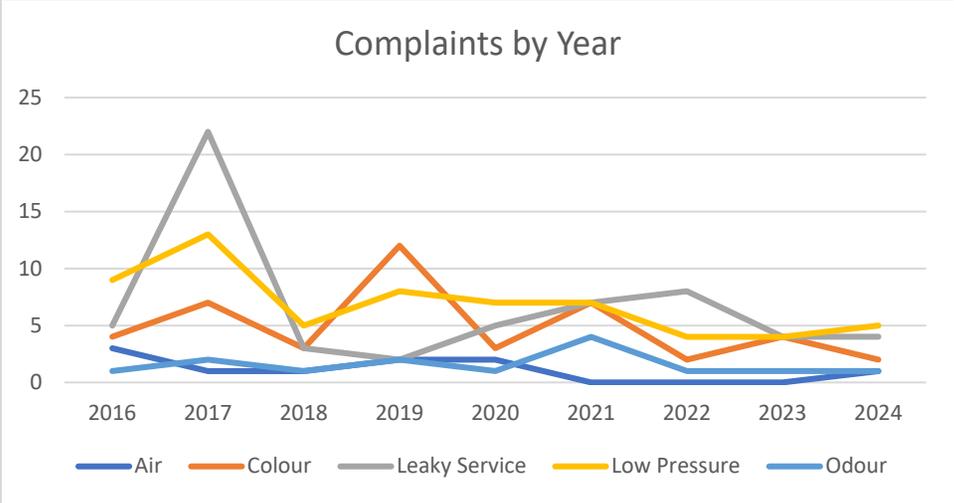
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	Chief. Awaiting completion of testing as verification.
Software / hardware – capital needs, other	
Operator software tablets Action (2020-OFI-11) is rescheduled to 31-Dec-2025 (from 2021-09-21, 31-Dec-2022 and 20-Mar-2025 ahead of Spring Maintenance) with 2021-BMP-01 pertaining to GPS equipment for valves / hydrants.	No additional recommendations or action items.
Pumping Station	
Region is moving forward with the Water Tower which will obsolete the pumping station (related to Risk Assessment Outcomes #s 1 and 2) as per OPEN 2020-OFI-05 MECF Inspection Recommendation with no further update aside from further delayed 2027/2028 infrastructure start as per DPW.	No additional recommendations or action items.
Staffing	
The number of Operators to be revisited in 2025 as per KPMG report with Council approval in 2026 if needed, as per DPW. Operator Sharing Agreements in place with 8 other Region of Niagara municipalities as per DPW.	No additional recommendations or action items.
Water Quality Complaints	
Annual summary in 'Complaint Summary' tab of ' Current Combined Water Ops 2015 onward spreadsheet! ' was reviewed: <ul style="list-style-type: none"> • Air tied to watermain breaks and colour • Colour internal plumbing issues led to an increase in 2019 (e.g., rusty water tanks) • Water main replacement has reduced Leaky Service which is to cease reporting to focus on regulatory requirements only, as per MPW; 2021 construction related colour and mostly age leaky service • Odour 2021 increase (6 vs. 4 reported during Infrastructure Review and now 1 as per Current Combined) with 1 was noted as regulatory; Odour already tracked as part 	No additional recommendations or action items.

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<p>of new WMS but (phone calls require manual entry) but not yet in use as still evaluating new WMS.</p> <ul style="list-style-type: none"> • Pressure moves from one area to another (LOW OR HIGH) <div style="text-align: center; margin: 10px 0;">  </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #555; color: white;"> <th style="text-align: left;">COMPLAINTS by YEAR</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2023</th> <th>2024</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>Air</td> <td>3</td> <td>1</td> <td>1</td> <td>2</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>10</td> </tr> <tr> <td>Colour</td> <td>4</td> <td>7</td> <td>3</td> <td>12</td> <td>3</td> <td>7</td> <td>2</td> <td>4</td> <td>2</td> <td>44</td> </tr> <tr> <td>Leaky Service</td> <td>5</td> <td>22</td> <td>3</td> <td>2</td> <td>5</td> <td>7</td> <td>8</td> <td>4</td> <td>4</td> <td>60</td> </tr> <tr> <td>Low Pressure</td> <td>9</td> <td>13</td> <td>5</td> <td>8</td> <td>7</td> <td>7</td> <td>4</td> <td>4</td> <td>5</td> <td>62</td> </tr> <tr> <td>Odour</td> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>4</td> <td>1</td> <td>1</td> <td>1</td> <td>14</td> </tr> <tr style="background-color: #555; color: white;"> <td>TOTAL</td> <td>22</td> <td>45</td> <td>13</td> <td>26</td> <td>18</td> <td>25</td> <td>15</td> <td>13</td> <td>13</td> <td>190</td> </tr> </tbody> </table>	COMPLAINTS by YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	TOTAL	Air	3	1	1	2	2	0	0	0	1	10	Colour	4	7	3	12	3	7	2	4	2	44	Leaky Service	5	22	3	2	5	7	8	4	4	60	Low Pressure	9	13	5	8	7	7	4	4	5	62	Odour	1	2	1	2	1	4	1	1	1	14	TOTAL	22	45	13	26	18	25	15	13	13	190	
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Infrastructure Review Meeting Minutes	
Details / Discussion Points / Issues Identified	Recommendation (for budget ask) / Action Items (tracked via QMS LIST 006)
<p>Best Management Practices (BMPs)</p> <ul style="list-style-type: none"> • QMS LIST 006 Corrective Action List OPEN 2021-BMP-01 (GPS equipment for valves scheduled to 2025) and 2024-BMP-03 to leverage the QMS Plan-Do-Check-Act process to drive the Town of Pelham's Sustainability Strategy through the 2025 Strategic Plan Review (scheduled for 1-Oct-2026 from 2024-12-31). • There are no additional Element 14 actions aside from those already listed in these minutes (i.e., 2020-OFI-05). 	<p>No additional recommendations or action items.</p>

Management Review Meeting Record

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The Corporation of the Town of Pelham Drinking Water Distribution System	
Meeting Location:	Tice Road Operations
Date / Time:	November 13, 2025, 1:00-2:30pm
Attendees:	Jason Marr (DPW), Dave Vaccaro (SWW), Ryan Cook (MPW), Sydney Etzl (Environmental Compliance Analyst [ECA]), Derek Young (Engineering Manager), Sandra Tavares (TGC Facilitator)
Minutes Recorded by:	Sandra Tavares (TGC)
Minutes to be distributed to:	DPW, MPW and Council

Management Review dated 14-Nov-2024 were communicated [2025-02-19 via 10.2.2](#) with Minutes located at '[\\192.168.0.2\Ops\PUBLIC WORKS & UTILITIES DEPARTMENT\E08 - Water Distribution \(Superseded + 15 years\)\DWQMS\Management Reviews](#)' by year.

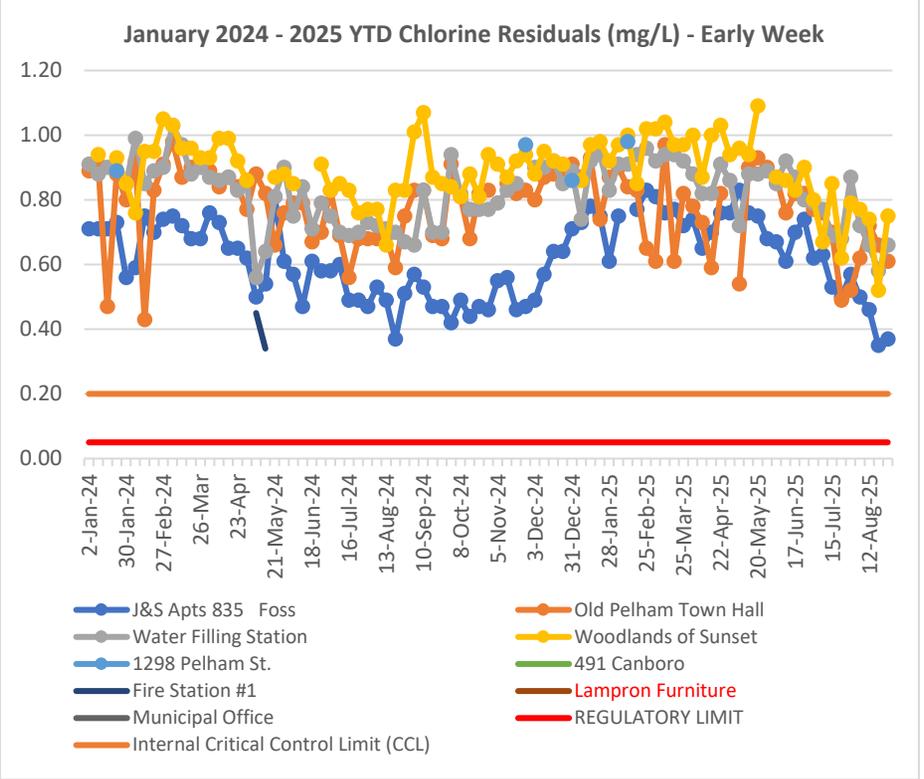
Minutes to be approved at next Management Review scheduled for 12-Nov-2026.

Management Review Meeting Minutes (completion of Action Items to be tracked via QMS LIST 006)				
Input	Details / Discussion Points / Issues Identified / Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
1)	<p>NO Incidents of regulatory non-compliance:</p> <ul style="list-style-type: none"> - Last MECP Inspection took place 1-Oct to 2-Dec-2024 (report received 6-Dec-2024; previous Oct-2023) and 25-26 May-2025 (report received 11-Jul-2025), both with 100.00% rating (last noncompliance in 2021). - MECP 2020-OFI-05 Elevated Tank has a 2027/2028 infrastructure start as per DPW (rescheduled from 2025 and 2026) 	Not Applicable (N/A)	N/A	N/A
2)	<p>Incidents of adverse drinking-water tests:</p> <ul style="list-style-type: none"> - Lampman 2 Total Coliform 2025 Adverse Water Quality Incident (AWQI) results thought to be laboratory error was reported 9-Oct and resolved 14-Oct, similar #s 164025 and 164036 11/14-Nov-2023 (same location; associated 2024-OFI-41 / 2024-IA-OFI-01 vii) Internal Audit Opportunity for Improvement (OFI) pertaining to QMS FORM 017 (AWQI Response) record retention has been COMPLETED. - 3-2022 TC and high residuals AWQIs - 2-2020 TC and high chlorine 9-Sep and 25-Jun - 4 incidents in 2015 as per 'Current Combined Water Ops 2015 onward spreadsheet' 'Maintenance Activities' tab. 	N/A	N/A	N/A

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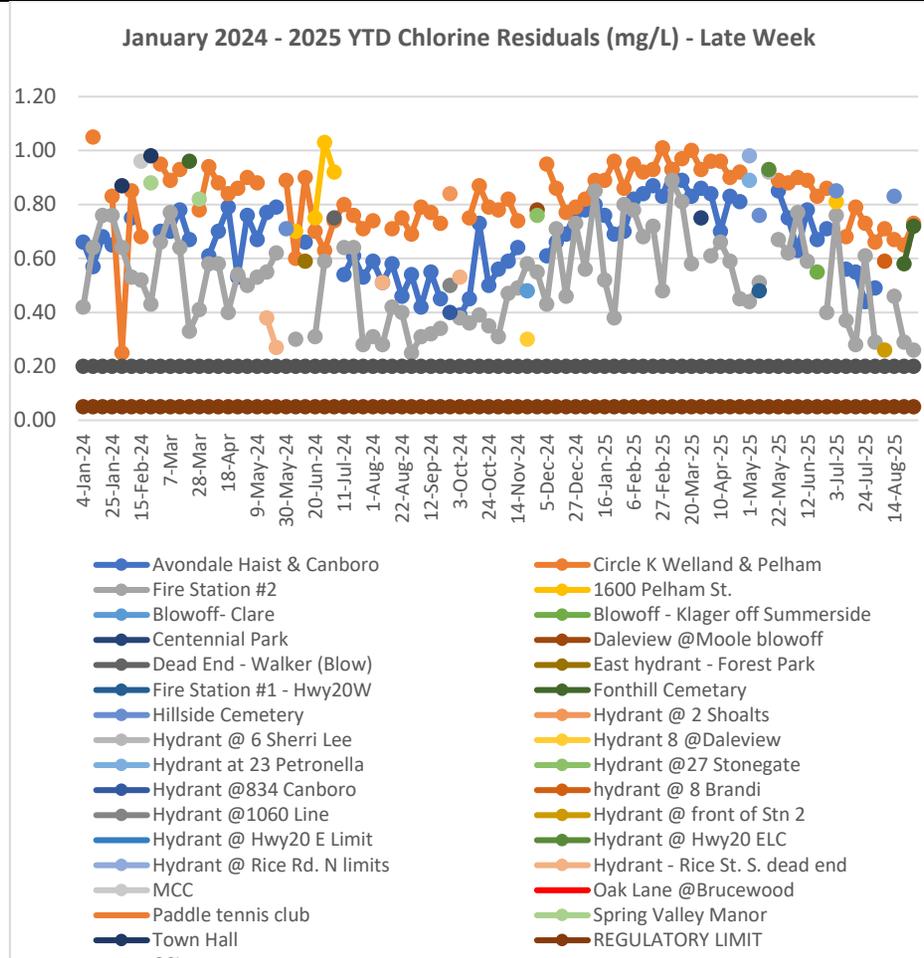
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Management Review Meeting Minutes <i>(completion of Action Items to be tracked via QMS LIST 006)</i>				
Input	Details / Discussion Points / Issues Identified /Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
3)	Deviations from Critical Control Limits and response actions:	N/A	N/A	N/A
	<p>QMS FORM 008 Chlorine Residual Sampling did not identify any deviations</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 5px 0;"> <p style="text-align: center; font-weight: bold;">January 2024 - 2025 YTD Chlorine Residuals (mg/L) - Early Week</p>  <p style="font-size: small;"> ● J&S Apts 835 Foss ● Old Pelham Town Hall ● Water Filling Station ● Woodlands of Sunset ● 1298 Pelham St. ● 491 Canboro ● Fire Station #1 ● Lampron Furniture ● Municipal Office — REGULATORY LIMIT — Internal Critical Control Limit (CCL) </p> </div>			

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Input	Details / Discussion Points / Issues Identified /Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
	<p>January 2024 - 2025 YTD Chlorine Residuals (mg/L) - Late Week</p>  <p>Legend:</p> <ul style="list-style-type: none"> Avondale Haist & Canboro Fire Station #2 Blowoff- Clare Centennial Park Dead End - Walker (Blow) Fire Station #1 - Hwy20W Hillside Cemetery Hydrant @ 6 Sherri Lee Hydrant at 23 Petronella Hydrant @834 Canboro Hydrant @1060 Line Hydrant @ Hwy20 E Limit Hydrant @ Rice Rd. N limits MCC Paddle tennis club Town Hall CCL Circle K Welland & Pelham 1600 Pelham St. Blowoff - Klager off Summerside Daleview @Moole blowoff East hydrant - Forest Park Fonthill Cemetary Hydrant @ 2 Shoalts Hydrant 8 @Daleview Hydrant @27 Stonegate hydrant @ 8 Brandi Hydrant @ front of Stn 2 Hydrant @ Hwy20 ELC Hydrant - Rice St. S. dead end Oak Lane @Brucewood Spring Valley Manor REGULATORY LIMIT 			

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Management Review Meeting Minutes (completion of Action Items to be tracked via QMS LIST 006)				
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4)	<p>The effectiveness of the risk assessment process:</p> <p>10-Apr-25 24-Month Review confirmed (further to QMS FORM 008 Chlorine Residual Sampling CCP deviations also reported above):</p> <ul style="list-style-type: none"> • Added 'Review of Infrastructure' column to 'Risk Assessment Results' tab with most risks either related to capital or operational budget items. • Attributed QMS SOP 023 Backflow Program (under review by ECA with anticipated 2026 first water bylaw review in 14 years) to appropriate Distribution hazards, Backflow from plumbing connection or illegal hydrant use and Terrorist threat or vandalism - hydrants, valve chambers, booster station; SWW and ECA commented 100 letters were provided to businesses deemed hazardous, with process and frequency to be determined in the new year at which point the website can be updated to address OPEN 2023-OFI-35 iv. • No changes to the distribution system (i.e., no assuming of subdivision as per Engineering representatives, infrastructure addition, new main or diameter as per DPW), modifications to existing processes (Engineering Standards to be revised with little anticipated impact to drinking water requirements, confirmed by ECA pushed out to 2026 from Dec-2025), regulatory changes or CCP threshold since the previous assessment/review. • Likelihood increase for #12 PRV and decrease for #15 Frozen water service • Reviewed, revised and approved QMS PROC 007 (rev.13) Risk Assessment procedure to address External Audit 2024-OFI-38 36-month ReAssessment process and clarified drinking water system 'change' as per 2025 Risk Assessment Review discussion. 	<p>Scheduled 36-Month Risk Assessment and associated Review of Infrastructure (prior to NSF Surveillance as per QMS LIST 006 'DWQMS Timeline' tab) and associated External Audit 2024-OFI-38 blank template</p>	TGC	9-Apr-2026
5)	<p>Internal / third-party audit results:</p> <ul style="list-style-type: none"> - 2024-IA-OFI-01 recurring Element 5 OFI is the only Internal Audit finding remaining OPEN - 2025 Internal Audit results in 6 OFIs pertaining to Elements 5, 9, 10, 13, 15 and 17 which have been entered QMS LIST 006 	N/A	N/A	N/A

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Management Review Meeting Minutes <i>(completion of Action Items to be tracked via QMS LIST 006)</i>				
Input	Details / Discussion Points / Issues Identified /Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
6)	<p>Results of emergency response testing:</p> <hr/> <p>Last Conducted 7-Dec-2023 pertaining to emergency scenarios associated with Pressure Release Valves; the 2025 exercise is to focus on Regional main, Canboro / Elm St. or backflow event.</p>	Scheduled Emergency Testing as part of Annual Training	TGC	9-Apr-2026 <i>(prior to External Audit)</i>
7)	<p>Operational Performance:</p> <ul style="list-style-type: none"> • Sampling results were confirmed by the SWW for quarterly TriHaloMethane (THM) and HaloAceticAcid (HAA) Running Annual Averages (RAAs) • Maintenance discussed included: <ul style="list-style-type: none"> - Annual Valve Maintenance was initiated for Quad 4 in November. Each of 4 Quads is completed annually with all done in 4 years. - 2025 Annual Hydrant Maintenance is COMPLETE for all 4 Quads; repairs are completed as time allows with the goal of completing by next Hydrant Maintenance Season. - Annual PRV maintenance COMPLETED 6-Nov-2025 with training identified as needed by the Operators raised as an internal audit OFI. - Monthly Watermain Pressure Testing data is added to SWW Running Average Spreadsheet to monitor any trends (none identified). - Semi-annual Dead End Blow Off Flushing (April-May) and Fall (Oct-Nov) is COMPLETE for 2025. - Leak Detection COMPLETED by Nichol 6-Oct-2025 for 6Km of water main with a focus on cast iron including 38 hydrants and conducted every couple of years with hydrant leak at #70 on Merritt Rd. fixed next morning by Operator. 	2022-AI-01 to develop a backflow SOP	ECA <i>(from SWW)</i>	OPEN with use / review of QMS SOP 023 by ECA: - 'Survey' letter, and - Backflow Test Report with none completed as of 23-Jan-2025 as per SWW
8)	<p>Raw water supply reports & drinking water trends:</p> <hr/> <p>Region of Niagara reports reviewed annually by MPW identified no issues except for Microcystin notices.</p>	N/A	N/A	N/A

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	the Central Forms Repository: "Schedule C – Director's Directions for Operational Plans (Subject System Description Form)"																																																																																							
12)	<p style="background-color: #fce4d6; margin: 0;">Consumer feedback <i>(incl. complaints)</i>:</p> <p>Annual summary in 'Complaint Summary' tab of 'Current Combined Water Ops 2015 onward spreadsheet' was reviewed:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <thead> <tr> <th style="text-align: left;">Complaints / Year</th> <th>'16</th> <th>'17</th> <th>'18</th> <th>'19</th> <th>'20</th> <th>'21</th> <th>'22</th> <th>'23</th> <th>'24</th> <th>'25 YTD</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>Air</td> <td>3</td> <td>1</td> <td>1</td> <td>2</td> <td>2</td> <td>-</td> <td>-</td> <td>0</td> <td>1</td> <td>-</td> <td>10</td> </tr> <tr> <td>Colour</td> <td>4</td> <td>7</td> <td>3</td> <td>12</td> <td>3</td> <td>7</td> <td>2</td> <td>4</td> <td>2</td> <td>6</td> <td>50</td> </tr> <tr> <td>Leaky Service</td> <td>5</td> <td>22</td> <td>3</td> <td>2</td> <td>5</td> <td>7</td> <td>-</td> <td>4</td> <td>4</td> <td>-</td> <td>52</td> </tr> <tr> <td>Low Pressure</td> <td>9</td> <td>13</td> <td>5</td> <td>8</td> <td>7</td> <td>7</td> <td>5</td> <td>4</td> <td>5</td> <td>8</td> <td>71</td> </tr> <tr> <td>Odour / Taste</td> <td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>2</td> <td>13</td> </tr> <tr> <td>TOTAL</td> <td>22</td> <td>45</td> <td>13</td> <td>26</td> <td>18</td> <td>22</td> <td>8</td> <td>13</td> <td>13</td> <td>16</td> <td>196</td> </tr> </tbody> </table> <p>As per SWW, 2025:</p> <ul style="list-style-type: none"> no longer reporting air / leaky service as not regulatory pressure increase due to new residents, e.g., 2 high pressure (25-Sep-2025 Millbridge) inquiries, 12-Apr-2025 answering service re: 39 Philmon, and 19-Aug-2025 low pressure all discussed; discussion around addressing pressure zones on website to proactively address inquiries. colour increase response identified no longer an issue 28-Mar-2025 odour on Chestnut 	Complaints / Year	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25 YTD	TOTAL	Air	3	1	1	2	2	-	-	0	1	-	10	Colour	4	7	3	12	3	7	2	4	2	6	50	Leaky Service	5	22	3	2	5	7	-	4	4	-	52	Low Pressure	9	13	5	8	7	7	5	4	5	8	71	Odour / Taste	1	2	1	2	1	1	1	1	1	2	13	TOTAL	22	45	13	26	18	22	8	13	13	16	196	N/A	N/A	N/A
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13)	<p style="background-color: #fce4d6; margin: 0;">The resources needed to maintain the QMS:</p> <ul style="list-style-type: none"> As per the 2025 Risk Assessment Review and the MPW, Operator capacity to be reviewed in 2026; DPW identified mutual Operator sharing agreements with 8 other regional municipalities with links on the Regional list in QMS LIST 002 emergency contacts; Operator re-certification completed for 	N/A	N/A	N/A																																																																																				

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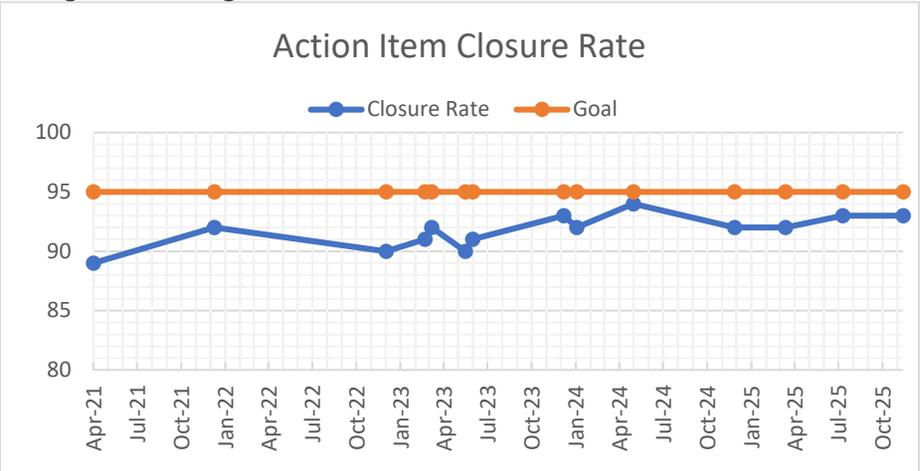
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Input	Details / Discussion Points / Issues Identified /Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
	<p>November 2025 which addresses address 2023-OFI-35 i). MPW advised personnel coverage for call ins to take place outside of this meeting.</p> <ul style="list-style-type: none"> 2025 DWQMS Timeline was reviewed, and dates agreed upon as reported throughout these minutes. 			
14)	<p>The result of the infrastructure review:</p> <ul style="list-style-type: none"> Infrastructure Review Meeting took place 10-Apr-2025 OPEN 2023-AI-06 to address Document Hydrant Flow Tester process and conduct Operator training was completed 10-Apr-2025 with verification of effectiveness as 2026 internal completion after a water model is developed by Aspire (last completed by GM Blue Plan) to establish parameters for pressure zones and demand, as per ECA DPW advised: <ul style="list-style-type: none"> 2026 Quaker watermain completion of 2024 capital project confirmed by Engineering Manager Cast iron replacement over next 8 years West Fonthill Canboro construction is starting this year with capital budget proposal to Council 18-Nov; 2025 Canboro watermain replacement deferred to 2026 design for Canboro and Pinecrest part of \$4M cast iron grant submission is scheduled for 2026 with Pelham Spruceside complete 2026 \$2M capital budget Canboro replacement from Haist to Pelham Council approved 2025 budget design work for cast iron main in Fenwick on Welland Rd. between Canboro and Balford deferred no asbestos water main replacement Water filling station controls completed Refer to item 11 above for OPEN 2020-OFI-11 and associated 2021-BMP-01 	N/A	N/A	N/A

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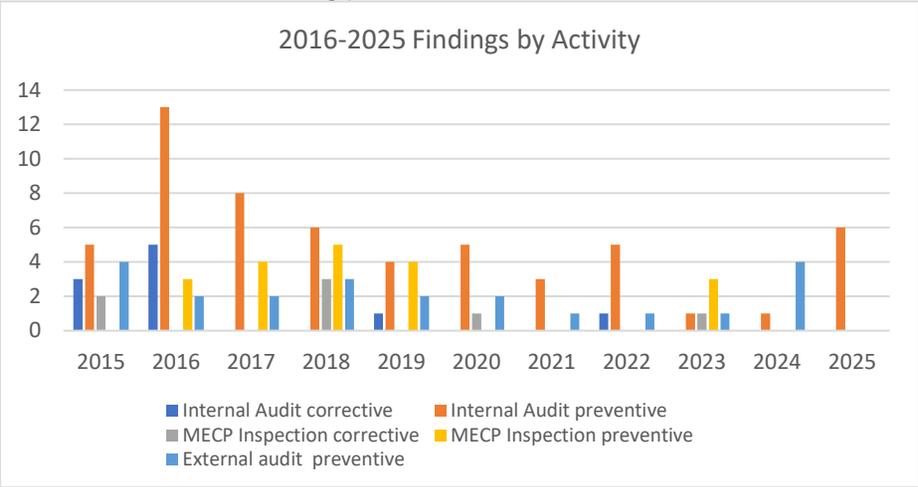
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15)	<p style="background-color: #fce4d6; margin: 0;"><u>Operational plan currency, content, and updates</u> (incl. need for re-endorsement):</p> <ul style="list-style-type: none"> Operational Plan (OP) and associated QMS PROC updates (some of which have been discussed above) as per QMS LIST 010 were completed in 2025 with no re-endorsement needed by Top Management (last completed 9-Feb-2021) or Council (lastly 21-Feb-2023) 2026 documentation review focus is on MECP changes and Integration of sanitary and storm procedures As per MPW, changes will be discussed as part of 2026 Annual Report Council submission with 2027 new Council re-endorsement 	Refer to 2025-AI-09 above.																																																														
16)	<p style="background-color: #fce4d6; margin: 0;">Personnel suggestions:</p> <p>Tracked via QMS LIST 006 all CLOSED and last raised in 2020.</p>	N/A	N/A	N/A																																																												
17)	<p style="background-color: #fce4d6; margin: 0;">General assessment of suitability, adequacy, and effectiveness</p> <p>QMS LIST 006 93% Closure Rate as of 13-Nov-2025 including 2025 Internal Audit finding, with a 95% goal.</p> <div style="text-align: center; margin-top: 10px;">  <table border="1" style="margin: 10px auto; border-collapse: collapse; font-size: small;"> <caption>Action Item Closure Rate Data</caption> <thead> <tr> <th>Date</th> <th>Closure Rate (%)</th> <th>Goal (%)</th> </tr> </thead> <tbody> <tr><td>Apr-21</td><td>89</td><td>95</td></tr> <tr><td>Jul-21</td><td>91</td><td>95</td></tr> <tr><td>Oct-21</td><td>92</td><td>95</td></tr> <tr><td>Jan-22</td><td>91</td><td>95</td></tr> <tr><td>Apr-22</td><td>90</td><td>95</td></tr> <tr><td>Jul-22</td><td>90</td><td>95</td></tr> <tr><td>Oct-22</td><td>91</td><td>95</td></tr> <tr><td>Jan-23</td><td>92</td><td>95</td></tr> <tr><td>Apr-23</td><td>90</td><td>95</td></tr> <tr><td>Jul-23</td><td>91</td><td>95</td></tr> <tr><td>Oct-23</td><td>93</td><td>95</td></tr> <tr><td>Jan-24</td><td>92</td><td>95</td></tr> <tr><td>Apr-24</td><td>94</td><td>95</td></tr> <tr><td>Jul-24</td><td>93</td><td>95</td></tr> <tr><td>Oct-24</td><td>92</td><td>95</td></tr> <tr><td>Jan-25</td><td>92</td><td>95</td></tr> <tr><td>Apr-25</td><td>93</td><td>95</td></tr> <tr><td>Jul-25</td><td>93</td><td>95</td></tr> <tr><td>Oct-25</td><td>93</td><td>95</td></tr> </tbody> </table> </div>	Date	Closure Rate (%)	Goal (%)	Apr-21	89	95	Jul-21	91	95	Oct-21	92	95	Jan-22	91	95	Apr-22	90	95	Jul-22	90	95	Oct-22	91	95	Jan-23	92	95	Apr-23	90	95	Jul-23	91	95	Oct-23	93	95	Jan-24	92	95	Apr-24	94	95	Jul-24	93	95	Oct-24	92	95	Jan-25	92	95	Apr-25	93	95	Jul-25	93	95	Oct-25	93	95	N/A	N/A	N/A
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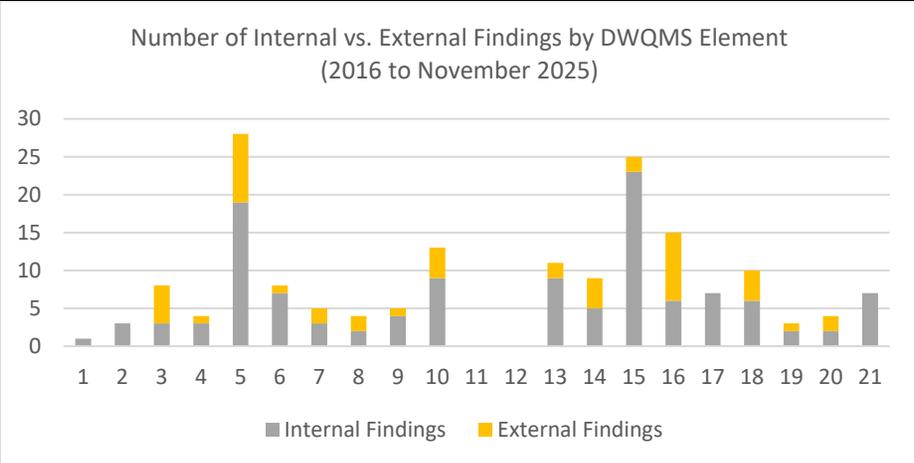
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	<p>Audits identified the following positive trend:</p> <div style="text-align: center; margin-bottom: 10px;">  <p>2016-2025 Findings by Activity</p> <table border="1" style="margin: auto; border-collapse: collapse; font-size: 8px;"> <caption>Approximate data from chart</caption> <thead> <tr> <th>Year</th> <th>Internal Audit corrective</th> <th>Internal Audit preventive</th> <th>MECP Inspection corrective</th> <th>MECP Inspection preventive</th> <th>External audit preventive</th> </tr> </thead> <tbody> <tr><td>2015</td><td>3</td><td>5</td><td>2</td><td>0</td><td>4</td></tr> <tr><td>2016</td><td>5</td><td>13</td><td>0</td><td>3</td><td>2</td></tr> <tr><td>2017</td><td>0</td><td>8</td><td>0</td><td>4</td><td>2</td></tr> <tr><td>2018</td><td>3</td><td>6</td><td>3</td><td>5</td><td>3</td></tr> <tr><td>2019</td><td>1</td><td>4</td><td>0</td><td>4</td><td>2</td></tr> <tr><td>2020</td><td>0</td><td>5</td><td>1</td><td>0</td><td>2</td></tr> <tr><td>2021</td><td>0</td><td>3</td><td>0</td><td>0</td><td>1</td></tr> <tr><td>2022</td><td>1</td><td>5</td><td>0</td><td>0</td><td>1</td></tr> <tr><td>2023</td><td>0</td><td>1</td><td>1</td><td>3</td><td>1</td></tr> <tr><td>2024</td><td>0</td><td>1</td><td>0</td><td>0</td><td>4</td></tr> <tr><td>2025</td><td>0</td><td>6</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table> </div> <ul style="list-style-type: none"> Most findings are generated from internal audits and mostly OFIs but taking a while to close (items from 2016 and 2022 [both backflow], 2 from each of 2020 [elevated tank and WMS] and 2023 [backflow and hydrant flow testing], 1 from 2021 [WMS]) Internal Audit findings related to Element 15 Infrastructure Maintenance, Rehabilitation and Renewal (WMS to address?) has now surpassed Element 5 Document and Record Control 	Year	Internal Audit corrective	Internal Audit preventive	MECP Inspection corrective	MECP Inspection preventive	External audit preventive	2015	3	5	2	0	4	2016	5	13	0	3	2	2017	0	8	0	4	2	2018	3	6	3	5	3	2019	1	4	0	4	2	2020	0	5	1	0	2	2021	0	3	0	0	1	2022	1	5	0	0	1	2023	0	1	1	3	1	2024	0	1	0	0	4	2025	0	6	0	0	0			
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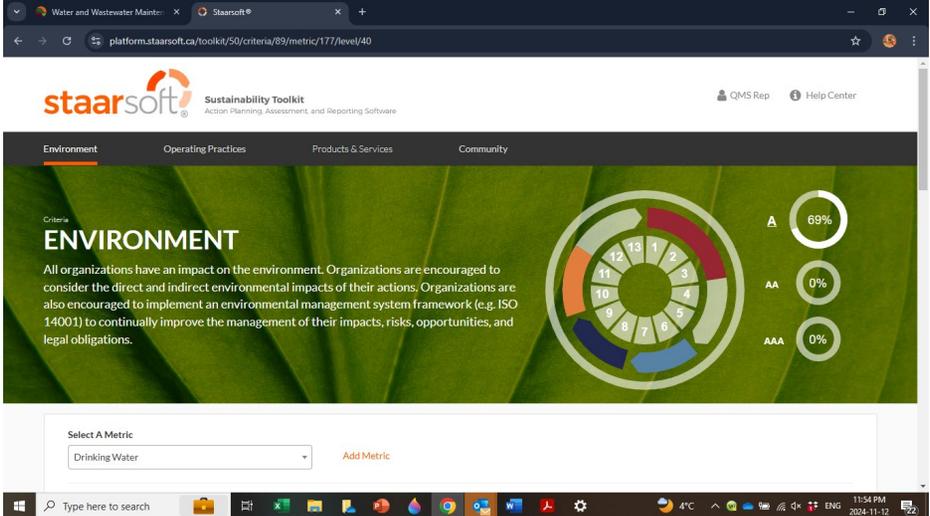
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	<p>Number of Internal vs. External Findings by DWQMS Element (2016 to November 2025)</p>  <table border="1" style="display: none; margin-top: 10px;"> <caption>Data for: Number of Internal vs. External Findings by DWQMS Element</caption> <thead> <tr> <th>Element</th> <th>Internal Findings</th> <th>External Findings</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td><td>0</td></tr> <tr><td>2</td><td>3</td><td>0</td></tr> <tr><td>3</td><td>3</td><td>4</td></tr> <tr><td>4</td><td>3</td><td>1</td></tr> <tr><td>5</td><td>19</td><td>8</td></tr> <tr><td>6</td><td>8</td><td>1</td></tr> <tr><td>7</td><td>3</td><td>2</td></tr> <tr><td>8</td><td>2</td><td>2</td></tr> <tr><td>9</td><td>4</td><td>1</td></tr> <tr><td>10</td><td>9</td><td>4</td></tr> <tr><td>11</td><td>0</td><td>0</td></tr> <tr><td>12</td><td>0</td><td>0</td></tr> <tr><td>13</td><td>10</td><td>1</td></tr> <tr><td>14</td><td>5</td><td>4</td></tr> <tr><td>15</td><td>23</td><td>2</td></tr> <tr><td>16</td><td>6</td><td>9</td></tr> <tr><td>17</td><td>7</td><td>0</td></tr> <tr><td>18</td><td>6</td><td>4</td></tr> <tr><td>19</td><td>2</td><td>1</td></tr> <tr><td>20</td><td>2</td><td>2</td></tr> <tr><td>21</td><td>7</td><td>0</td></tr> </tbody> </table> <p>■ Internal Findings ■ External Findings</p>	Element	Internal Findings	External Findings	1	1	0	2	3	0	3	3	4	4	3	1	5	19	8	6	8	1	7	3	2	8	2	2	9	4	1	10	9	4	11	0	0	12	0	0	13	10	1	14	5	4	15	23	2	16	6	9	17	7	0	18	6	4	19	2	1	20	2	2	21	7	0			
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18)	<p>Review and consideration of applicable Best Management Practices (BMPs) Refer to item 14) above for the current BMP.</p> <p>1. BMP trending over leading Municipalities is leveraging DWQMS to address Sustainability continues from the 2024 Management Review</p> <p>Town of Pelham's QMS remains at 69% of the Sustainability framework in place with the following steps <i>(as outlined in the first graphic below)</i> to be addressed for efficient management (at least 20% savings) of water and related Sustainability priorities:</p> <p>Step 1. Assessing and prioritising water risk (beyond DWQMS Risk Assessment, Consumer Health & Safety QMS Policy and Complaints requirements) in the context of other Stakeholder Sustainability Priorities (e.g., climate change already initially addressed as part of the DWQMS Risk Assessment and contributing to the Town's 2021 Climate Change Adaptation Plan, Energy Efficiency and associated Town 2024 Conservation and Demand Management</p>	<p>2025-AI-08 Leverage the QMS Plan-Do-Check-Act process to drive the Town of Pelham's Sustainability Strategy through the 2025 Strategic Plan Review.</p>	<p>DPW</p>	<p>1-Oct-2026 <i>(from 31-Dec-2024)</i></p>																																																																		

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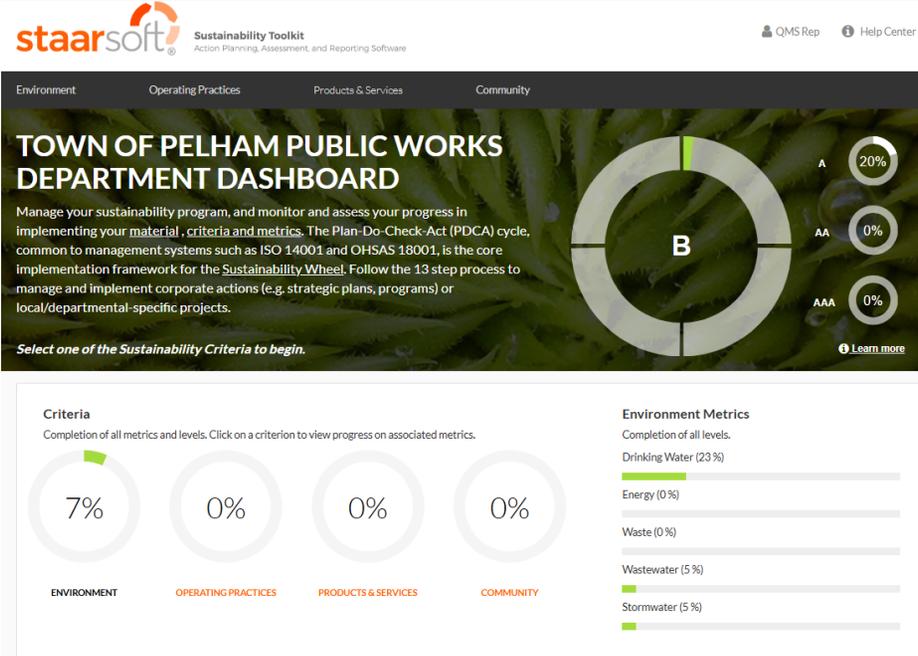
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	<p>and other Plans, Occupational Health & Safety, Waste and now including Wastewater and Stormwater, etc. <i>identified in the second and third graphics below</i>)</p> <p>Step 2. Confirming Water and other Sustainability Material Metrics discussed throughout, and outside, this meeting</p> <p>Step 11. Influencing Supply Chain beyond DWQMS Essential Supplies and Services requirements to include Sustainability (e.g., Responsible Sourcing)</p> <p>Step 12. Confirming Reporting to Stakeholders (e.g., through website), and</p> <p>Step 13. Recognition of DWQMS in the context of Sustainability (e.g., OWWA Awards of Excellence in Water Efficiency discussed at 2024 Management Review and 2025 Water Canada Drinking Water Large Project Award top 3 finalist LHPWSS energy savings for pump optimisation)</p> 			

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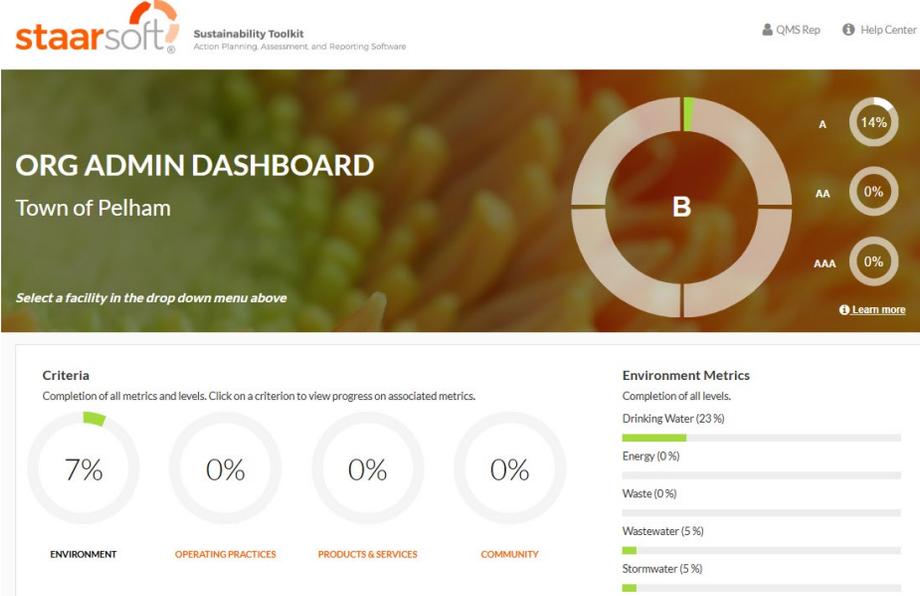
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	 <p>With DWQMS, Public Works is currently contributing 7% (from 6% in 2024) to the Town's incipient (i.e., Level B) Environmental Strategy which includes Energy, Waste, Wastewater and Stormwater and 20% (from 17% in 2024) to the beginning stages (i.e., Level A) of the overall Sustainability Strategy.</p> <p>All of the Town's Sustainability priorities outlined in various plans at https://www.pelham.ca/en/town-hall/plans-and-reports.aspx can contribute to the Sustainability Strategy score and their progress directly compared to drive priorities and focus (e.g., energy, waste and wastewater).</p>			

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Management Review Meeting Minutes <i>(completion of Action Items to be tracked via QMS LIST 006)</i>				
Input	Details / Discussion Points / Issues Identified /Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
	 <p>Together, with all other Town departments, the DWQMS program currently contributes 14% <i>(from 12% in 2024)</i> to the entire Town Sustainability Strategy.</p> <p>Sustainability distractions, constantly reacting to varying stakeholder requests, and employee turnover due to disengagement, costs time and money. Utilising a QMS process-based approach to identify, manage and report on Sustainability priorities will result in an organized, consistent, and predictive strategy that anticipates risk and opportunity while identifying at least 20% cost savings.</p>			

Management Review Meeting Record

Revision #01

Document #QMS FORM 027

Management Review Meeting Minutes <i>(completion of Action Items to be tracked via QMS LIST 006)</i>				
Input	Details / Discussion Points / Issues Identified /Decisions Made	Action Item(s)	Responsibility	Proposed Due Date
	2. MECP has published Drinking Water Management System BMPs, https://www.ontario.ca/page/drinking-water-system-best-management-practices [ontario.ca] , with Operating Authorities required to consider these under DWQMS Element 21. A meeting has been scheduled 4-Dec-2025 to discuss with MPW, DPW, SWW, ECA and Operators to identify current practices and improvements.			



The Corporation of the Town of Pelham

Drinking Water Quality Management System (v2) Internal Audit Report

*20 Pelham Town Square
P.O. Box 400
Fonthill ON, L0S 1E0*

Internal Audit Dates: 12/13 November 2025
Report Distribution: Ryan Cook, *Manager of Public Works (MPW)*
Report Issued: 24 November 2025

A handwritten signature in black ink, appearing to read "S. Tavares".



Sandra Tavares, *B.Sc., M.Sc., EP(EMSLA), EP-Sustainability*
(CECAB / EcoCanada Certified EMS Lead Auditor since 2008)

Project Objectives

Tavares Group Consulting Inc. was engaged by The Town of Pelham to conduct an Internal Audit of the Town’s Drinking Water Quality Management System (QMS) against the Drinking Water Quality Management Standard (DWQMS V2). This audit was conducted to satisfy the requirements of the DWQMS Element 19 requirement to complete a QMS internal audit at least once every calendar year. Please see [Annex A](#) for auditor qualifications.

Project Scope

An onsite audit was performed 12-13 November 2025 according to ISO 19011:2018 Guidelines for auditing management systems, including the Internal Audit Plan issued 16-Sep-2025 to confirm:

- the QMS conforms with the applicable elements of the DWQMS; and
- Corporation of the Town of Pelham conforms with its own policies and procedures.

Results of prior internal and external audits were also considered and reviewed through the course of the audit.

An Opening Meeting was held 12-Nov-2025 with the Environmental Compliance Analyst (ECA), Supervisor Water / Wastewater (SWW) and Operators with a Closing Meeting 13-Nov-2025 during Management Review and including the ECA, SWW, Director and Manager of Public Works (all interviewees) as well as the Engineering Manager. Other interviewees included the Region of Niagara Manager of Water Systems Maintenance as part of the tour of the Chestnut Ridge Booster Station, for which they are responsible to maintain.

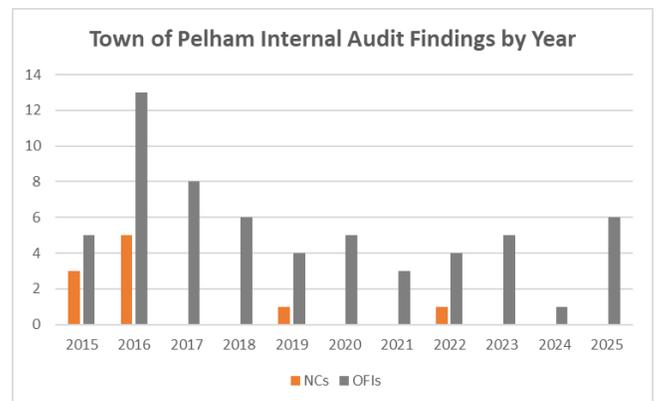
Conclusions

The Town of Pelham’s QMS conforms with:

- the applicable elements of the DWQMS, and
- its own policies and procedures.

Public Works’ (Operating Authority [OA]) commitment to the improvement of its QMS is evident and has the appropriate elements in place for further improvement.

In total, there were **six [6]** Opportunities for Improvement (OFIs) identified with no recurring Element 5 Records Control issues. Refer throughout the audit report for previous audit finding follow-up (*details regarding closure and verification can be found in Corrective and Preventive QMS LIST 006*). A [Summary of Findings](#) has been provided below with details in the [Comments](#) portion of the report; an identification number (e.g., 2025-IA-OFI-XX) has been assigned for the new finding.



Confidentiality

This report was prepared exclusively for The Corporation of the Town of Pelham and is based on information collected during off- and on-site reviews. The scope of the project is described in this report and is subject to restrictions, assumptions, and limitations. As noted herein, the work was conducted in accordance with the scope of Tavares Group Consulting’s proposal and Terms and Conditions.

Summary of Findings

Owner (& Operating Authority):		The Corporation of the Town of Pelham (Public Works)
Auditors:		Sandra Tavares (<i>Lead</i>) and Francis Chua (<i>Team Member</i>)
System Reviewed:		Pelham Distribution System (PDS)
REQUIREMENT ↓	FINDING(S) ↓	
1. Quality Management System	C	
2. Quality Management System Policy	C	
3. Commitment and Endorsement	C	
4. Quality Management System Representative	C	
5. Document and Records Control	2025-IA-OFI-01 <i>OPEN</i> 2024-IA-OFI-01	
6. Drinking Water System	C	
7. Risk Assessment	C	
8. Risk Assessment Outcomes	C	
9. Organizational Structure, Roles, Responsibilities and Authorities	2025-IA-OFI-02	
10. Competencies	2025-IA-OFI-03	
11. Personnel Coverage	C	
12. Communication	C	
13. Essential Supplies and Services	2025-IA-OFI-04	
14. Review and Provision of Infrastructure	C	
15. Infrastructure Maintenance, Rehabilitation and Renewal	2025-IA-OFI-05	
16. Sampling, Testing and Monitoring	C	
17. Measurement and Recording Equipment Calibration and Maintenance	2025-IA-OFI-06	
18. Emergency Management	C	
19. Internal Audits	C	
20. Management Review	C	
21. Continual Improvement	C	
C	Conforms to the requirement – See comments in body of report	
NC	Non-conformity	
OFI	Opportunity for improvement – See Annex A	
OFI *	Opportunity for improvement which may become a nonconformity if not addressed– See Annex A	

Audit Summary

DWQMS Reference
Evidence
Finding
Summary

1. Quality Management System

Pelham Distribution System (PDS) Operational Plan (rev.20, 10-Jul-2025)

Conforms

Public Works has established and maintains its Quality Management System (QMS) in accordance with the DWQMS and the policies and procedures documented in the Pelham Distribution System (PDS) Operational Plan (OP), updated in 2025 to revise Section 15 to replace QMS FORM 001 with QMS SOP 001 Dead End Blow Off Flushing to better reflect process (April) and reverse Overall Responsible Operator (ORO) and Alternate MPW/SWW roles and associated Element 10 OWWCO approval clarification.

6 OFIs were identified pertaining to Elements 5, 9, 10, 13, 15 and 17.

DWQMS Reference
Evidence

Finding
Summary

2. Quality Management System Policy

PDS OP Element 2, S801-01 (Council Approval date of 22-Mar-2021 and OA sign-off 2-Mar-2021)

Conforms

The Pelham OP documents a QMS Policy within S801-01, signed by the DPW and MPW 2-Mar-2021, and approved by Council 22-Mar-2021 via agenda number 10.2.6, that has been established and is maintained, which provides the foundation for and is consistent with the QMS, and:

- a) includes a commitment to the maintenance and continual improvement of the QMS as per Elements 15 and 21 below,
- b) includes a commitment to the Consumer to provide safe drinking water consistent with Element 16,
- c) includes a commitment to comply with applicable legislation and regulations as per Element 3 directly below, and
- d) is in a form that can be communicated to Public Works personnel, the Owner (represented by the Mayor and Council) and the Public, available online at <https://www.pelham.ca/en/living-here/water-and-wastewater-maintenance.aspx>. Consistent with PDS OP Element 2, the Policy is also posted at the Town of Pelham Operations Centre (*refer to OPEN 2024-IA-OFI-01*) and is available upon request. As per QMS PROC 021, it was last communicated to Essential Suppliers via email by the SWW 21-Jan-2025 as per the QMS LIST 006 DWQMS Timeline tab.

DWQMS Reference
Evidence
Finding
Summary

3. Commitment and Endorsement

PDS OP Element 3

Conforms

21-Feb-2023 Council Endorsement of the OP and Summary Report is in Appendix A with endorsement by OA Top Management (i.e., DPW and MPW) most recently 9-Feb-2021. Top Management has provided evidence of its commitment by:

- i. ensuring a QMS is in place that meets the requirements of the DWQMS as per Element 1;
- ii. communicating the QMS as per Element 12;
- iii. determining, obtaining, and providing the resources needed to maintain and continually improve the QMS as per Management Review

outlined in Element 20 (none identified as part of the 2024 and 2025 meetings); and

- iv. ensuring the OA is aware of applicable regulatory requirements for which include proposed MECP **changes to DWQMS** and **Director’s Directions** and **new Best Management Practices (BMPs)**, all discussed as part of the 2025 Management Review. Potential changes continue to be communicated to OA Top Management through the MECP Inspector as part of annual inspections, e-mails from the Ontario Municipal Water Association (OMWA), Municipal Water and Wastewater Regulatory Committee (MWWRC) and Region of Niagara Municipal QMS/Compliance Working Group.

DWQMS Reference
Evidence
Finding
Summary

4. Quality Management System Representative

PDS OP Element 4

Conforms

The QMS Representative is identified within the OP Element 4 as the MPW, appointed via a Memorandum of Understanding (MoU) issued by the Public Works Department – Engineering 15-Dec-2015 and approved via by-law, as per OP Appendix B. Responsibilities described under Element 9 were confirmed during the audit include:

- administering the QMS by ensuring that processes and procedures needed for the QMS are established and maintained and that current versions of documents are being used as per Element 5;
- reporting to Top Management on QMS performance as per Element 20, most recently 13-Nov-2025; and
- ensuring that personnel are aware of applicable regulatory requirements and the QMS as per Elements 3, 10 and 12.

DWQMS Reference
Evidence
Finding
Details

5. Document and Records Control

PDS OP Element 5, QMS PROC 005 (rev.15, 10-Apr-25), QMS LIST 010 Document Management List (rev.4, 1-Feb-2024, last updated 10-Jul-2025)

Opportunity for Improvement 2025-IA-OFI-01

There is an opportunity to:

- i) *eliminate duplication by referencing Annual Report Pelham population from OP Element 6 (14,025 and 13,300 residents were respectively identified),*
- ii) *update Engineering Drawing referenced in OP Element 6 and, consistent with Storm and Sanitary Sewers Operations & Maintenance Manuals, QMS SOP 016.*
- iii) *add blank Chain of Custody Form to QMS PROC 005 Document and Record Table, for easy access.*
- iv) *ensure Contractor QMS FORM control (e.g., Contractor Plan QMS FORM 010 rev.1 was used by Beam on 12-Dec-2024 Kunda Park project rather than rev.3).*

Summary

QMS PROC 005, recently revised to add MECP Inspections to Document / Record Table, update hyperlinks and clarify document approval, also identifies the document and records control process that includes how documents are kept **current**, and documents and records are created, remain **legible** and **identifiable** (the latter via headers), and are **retrieved, stored, retained**, and

disposed. PDS' QMS documentation includes the OP and associated procedures (PROC), Standard Operating Procedures (SOPs), FORMs and LISTs, some of which were confirmed and referenced throughout this audit report. **QMS LIST 010** identifies QMS documentation by name, revision number, date, controlled copy location (confirmed for the **OP** including obsolete versions to be retained according to the **Director's Directions**), and, for forms, change history. **Internal and External Audit and Management Review** records are retained as per **QMS PROC 005**. 3900-2017 - Records Retention By-law and Records Retention Schedule/Citation Table #03-01-04 (2024-07) was confirmed current as per the ECA (*refer to Element 9 2025-IA-02 below*) along with no changes to the Town of Pelham Emergency Management Plan adopted by Town Council By-Law 4489-2022. The **2024-IA-OFI-01** to ensure document control has been partially addressed with the following still open:

- i) OP availability at Town Hall (e.g., S801-01 in the OP binder is dated 9-Feb-2021 and posted version has a 2016 Approval Date; hardcopy OP includes outdated QMS LIST 003 [rev.4, 28-Jan-2029]).
- ii) **QMS LIST 014 Valve Quadrants** (rev.1, 19-Apr-2023) use for 2024 Valve Inspections (obsolete QMS FORM 014 was provided for 2023 and still available in the active document directory) which requires the addition of Operator Initials for completion of each valve, and
- vi) **Contractor Plan QMS FORM 010** (rev.3) for Quaker Road 25-Sep-2025 by Peters.

DWQMS Reference
Evidence
Finding
Summary

6. Drinking Water System

PDS OP Element 6

Conforms

A description of the Class 2 Water Distribution System has been documented within OP Element 6 (*refer to Element 5 2025-IA-OFI-01 i) and ii) directly above*), owned by the Corporation of the Township of Pelham, and operated by the Public Works Department referencing the annual Engineering inventory for the system's components:

- approximately 86 Km of **water main**,
- **fire hydrants, valves, and service connections**,
- Pressure Reducing Valves (**PRVs**) as per QMS LIST 015, and
- **pressure boosting station** serving Chestnut Ridge at 177 Hwy 20 toured with SWW, Operators and Regional Municipality of Niagara (i.e., 'the Region') Manager of Water Systems Maintenance, the latter responsible for contracted maintenance and operation (i.e., biweekly inspection for motors and PRV with yearly maintenance report; Remote Station Logbook 2025 in place).

PDS **receives** treated drinking water from the Welland Water Treatment Plant, owned and operated by the Region which is relied upon to ensure the provision of safe drinking water. A description of the water source and treatment process has been documented, in addition to a **process flow chart**. The subject system is also **connected** to the Welland Distribution System (owned and operated by the City of Welland) via 3 connections (valves have been closed since 1970). The Town of Pelham **maintains disinfection residuals** through the flushing program – *refer to Element 15 for more details*. There are no common **event-driven**

fluctuations or resulting operational challenges or threats concerning the water source.

DWQMS Reference
Evidence

7. Risk Assessment

QMS PROC 007 (rev.13, 10-Apr-25), QMS LIST 001 Risk Assessment Outcomes List (rev. 5, 19-Apr-2023) completed 10-Apr-2025 (24-Month Review)

Finding
Summary

Conforms

QMS PROC 007, recently revised as part of the 10-Apr-2025 24-Month Risk Assessment Review to update the **36-Month ReAssessment** process as a result of **External Audit 2024-OFI-38**, also documents a risk assessment process where hazards and associated events are ranked based on likelihood, consequence, and detectability, with those meeting the threshold of 7 and higher identified as Critical Control Points (CCPs). A risk review or re-assessment may also be conducted if significant changes occur within the Drinking Water System (e.g., change in size or scope of the system, addition of new infrastructure). The **annual review** was most recently completed 10-Apr-2025 (same day 'Review of Infrastructure) with the following revisions and updates noted:

- Attributed **QMS SOP 023 Backflow Program** (under review by ECA with anticipated 2026 first water bylaw review in 14 years) to appropriate Distribution hazards, Backflow from plumbing connection or illegal hydrant use and Terrorist threat or vandalism - hydrants, valve chambers, booster station; the 2016 **MECP backflow recommendation** remains **OPEN**.
- **No changes** (defined within revised QMS PROC 007 which does not apply to like for like) to the distribution system (i.e., no assuming of subdivision as per Engineering representatives, infrastructure addition, new main or diameter as per DPW), modifications to existing processes (Engineering Standards to be revised with little anticipated impact to drinking water requirements, confirmed by ECA pushed out to 2026 from Dec-2025), regulatory changes or CCP threshold since the previous assessment/review
- **No** QMS FORM 008 Chlorine Residual Sampling **CCP deviations** since last Risk Assessment Review, and as per 2023-OFI-34 trending reviewed as part of the 2025 Review of Infrastructure and during this Audit
- Likelihood increase for #12 PRV and decrease for #15 Frozen water service

DWQMS Reference
Evidence

8. Risk Assessment Outcomes

QMS PROC 007, QMS LIST 001 Risk Assessment Outcomes List, QMS SOP 001 (rev.8, 12-Mar-2025)

Finding
Summary

Conforms

QMS LIST 001 demonstrates implementation of a risk assessment, consistent with QMS PROC 007. **MECP hazards** such as chemical spill impacting source water is addressed in an evergreen Memorandum of Understanding (MoU) dated 21-Apr-2016 with the Regional Municipality of Niagara (no proposed changes identified as per SWW) and signed by the former DPW, with no incidences reported. One voluntary **CCP** has been identified related to loss of chlorine residual due to long residence time (Critical Control Limit [CCL] = 0.20 mg/L). **Flushing** measures to restore residual is documented as per QMS SOP 001 (*refer to Elements 6 and 15*), recently revised to reflect QMS LIST 004 Dead End Blow-Off Flushing to address 2024-OFI-41 iv and replace QMS FORM 001.

As confirmed via QMS LIST 006, the last deviation from the identified CCL took place 11-Jun-2020 as per 2021-NC-01; QMS FORM 008 Chlorine Residual Sampling also confirmed this for 2024 and 2025 which continues to be trended for identification of potential issues (none identified by SWW or Operators). **Response, reporting, and recording processes** in the event of a **deviation** from the identified CCL have been documented within QMS PROC 016 (*refer to Element 16*). As per QMS FORM 026, the risk assessment outcomes were reviewed at the Infrastructure Review with **OPEN 2023-AI-06** to document Hydrant Flow Tester process although Operator training was completed 10-Apr-2025; a water model is being developed by Aspire (last completed by GM Blue Plan) to establish parameters for pressure zones and demand in preparation for internal hydrant flow testing.

DWQMS Reference
Evidence
Finding
Details

9. Organizational Structure, Roles, Responsibilities and Authorities

PDS OP Element 9

Opportunity for Improvement 2025-IA-OFI-02

There is an opportunity to document Environmental Compliance Analyst Drinking Water role (including Figure 3), responsibilities and authority within Operational Plan Element 9.

Summary

Figure 3 Organizational Chart identifies the OA organizational structure including respective roles, whose responsibilities and authorities are described within OP Element 9 and confirmed during the onsite audit. **Top Management**, as per Element 3 above, continues to be involved in Infrastructure and Management Reviews. The **SWW** is responsible for ensuring maintenance is conducted and documented (e.g., 'Current Combined Water Ops 2015 onward' spreadsheet). **Operators** respond to watermain breaks and conduct maintenance, etc. as confirmed during interviews.

DWQMS Reference
Finding
Details

10. Competencies

Opportunity for Improvement 2025-IA-OFI-03

There is an opportunity to provide Pressure Reducing Valve maintenance training to Operators.

Evidence
Summary

PDS OP Element 10, Operator Training Summaries

OP Element 10, recently revised to clarify Element 10 OWWCO approval, documents the associated competencies of personnel whose duties directly affect drinking water quality (i.e., Operators). Regular training is provided and can take place off-site, On-the-Job, or electronically with the SWW selecting courses from training provider listings such as the Walkerton Clean Water Centre and Essential Suppliers (e.g., Wolseley) providing 1 hour equipment training sessions. **QMS Awareness** training is provided to new and existing operations personnel where the OP is reviewed and covers relevance of duties (lastly 10-Apr-2025 which incorporates documentation changes, including record control issues) with no new Operators since the last internal audit. Updated Operator Training Summaries are in place by name and tab related to the certificate duration maintained by the SWW. The following training was reviewed with the SWW for personnel interviewed (certificates were reviewed as per <https://owwco.ca/operator-listing-report/>):

- **B. Smith** Water Distribution (**WD**) **Class II** #109261 exp.30-Nov-2028 as per
- **D. Vaccaro** (**SWW**) **WD Class II** #71210 exp.31-Jan-2026

- **L. Johnson** (*newest hire as of 8-Aug-2023*) Water Distribution and Supply (WS) Class II #94663 exp.30-Nov-2027 took 3-7 Feb-2025 TM Sewer & Watermain, July-2024 California State Water Distribution, SCOWWA Conference
- **R. Cook (MPW) WD Class II and WS Operator-In-Training (OIT) OT130335** exp.30-Nov-2027
- **S. Berstling WD Class II #58758** exp.28-Feb-2026 took 2025 Advanced Sewer and Watermain Construction Inspection Course 2-7 Mar-2025 by Good Roads

As per QMS LIST 006 Corrective and Preventive Action List, **IN PROGRESS 2023-OFI-35** is in progress with backflow website updates remaining outstanding and QMS SOP 016 requiring updating in line with the Storm and Sanitary Sewer Operations & Maintenance Manuals.

DWQMS Reference
Evidence
Finding
Summary

11. Personnel Coverage

PDS OP Element 11, QMS PROC 011 (rev.9, 30-Mar-2022)

Conforms

OP Element 11 documents a process to ensure sufficient personnel meeting the identified competencies outlined in Element 10 directly above are available for duties that directly affect drinking water quality. The Town has an after normal working hours emergency telephone number which is still serviced by a Call Centre and will contact designated On Call Personnel. **ORO** designation (i.e., recently updated to SWW as per Element 1 above) is documented via email for holidays and identified for alternate 11-Aug-2025. After hours calls, a few times per year, generally still involve water main breaks (as per Element 15), service leaks, and emergency shut offs, with call outs documented in the respective form (e.g., Work Order [WO]), Water Distribution System Operation Record / **Logbook** (observed for 17-Jul to 26-Sep-2025 with no Adverse Water Quality Incidents [AWQIs] noted as per QMS FORM 017) or On-Call Log as per MPW. No frozen services were noted since 2021.

DWQMS Reference
Evidence
Finding
Summary

12. Communication

PDS OP Element 12, QMS PROC 021 (rev.10 17-Feb-2022) and QMS SOP 016 Consumer Complaints (rev.8, 15-Feb-2024)

Conforms

QMS PROC 021 documents a process that involves communication of the QMS Policy (*refer to Element 2 above*) and how **Top Management** communicates to the **Owner**, e.g.:

- **Committee and Council meetings** (*refer to Element 3 above*), which includes the results of the annual **Management Review** (*refer to Element 20*)
- **Annual Water Quality Reports** (e.g., 2024 available online [dating back to 2015] through [Water and Wastewater Maintenance - Town of Pelham](#)),
- **Infrastructure Review** (*refer to Element 14 below*).
- QMS On-the-job instructions are communicated to **OA personnel** during tailgate talks and may be documented via QMS FORM 016 (*refer to Element 10 above for more information on QMS Awareness*) as well as informal daily meetings which may cover maintenance procedures identified in Element 15 below (e.g., QMS SOP 014 Watermain Valve Exercise and Inspection Program, QMS SOP 022 PRV Maintenance).

Public water concerns / complaints are managed as per QMS SOP 016 Consumer Complaints. Details are tracked on the 'Current Combined Water Ops 2015 onward' spreadsheet's 'Complaint Summary' tab which identifies the following, with 2025 increases discussed as part of the 13-Nov-2025 Management Review:

Complaints / Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 YTD	TOTAL
Air	3	1	1	2	2	-	-	0	1	-	10
Colour	4	7	3	12	3	7 (construction)	2	4	2	6	50
Leaky Service	5	22	3	2	5	7 (mostly age)	-	4	4	-	52
Low Pressure	9	13	5	8	7	7	5	4	5	8	71
Odour / Taste	1	2	1	2	1	1	1	1	1	2	13
TOTAL	22	45	13	26	18	22	8	13	13	16	196

DWQMS Reference Evidence Finding Details

13. Essential Supplies and Services

PDS OP Element 13, QMS PROC 013 (rev.14, 26-Jun-2025)

Opportunity for Improvement 2025-IA-OFI-04

There is an opportunity to:

- i) update the QMS PROC 013 Essential Supplies and Services Table to add Eurofins to the Microbiology Laboratory Services and remove Wolseley personnel contact (i.e., Scott).
- ii) add repair clamp quality requirements to Watermain Break Report QMS FORM 025.

Summary

QMS PROC 013 documents a process by which Public Works lists and ensures the quality of essential supplies and services. Procurement Policy By-Law S402-00 updated 23-Feb-2023 was confirmed as current by the ECA and highlights the tendering process with no specific reference to Public Works or DWQMS. Nov-2017 Engineering Design Manual which pertains to drinking water quality requirements (e.g., AWWA, ANSI/NSF 61, no lead for valves, chambers, main) is still in effect with an intent for revision in 2026 as per DPW. Public Works personnel are responsible for inspecting all received supplies to confirm identified requirements. The following quality requirements were verified:

- **Anchem Anchlor 12 sodium hypochlorite** 10L jug dated 23-Oct-2025 (*kept for one year as per SWW*) in maintenance garage included **NSF/ANSI/CAN 61** mark.
- **CALA Directory of Laboratories Memberships** 1003086 for **E3 Laboratories Inc.** was confirmed valid to 9-6-2027 1003086 via CALA certificate; Eurofins CALA 1002602 exp.12/03/2027 for lead (inorganic, TriHaloMethane [THMs] and HaloAcetic Acid [HAAs])
- Tice Road Operations Centre storage trailer was visited with SWW and 2 Operators where **AWWA** Repair clamps and C90 pipe was observed and Vancor confirmed as vendor for 90% of **equipment** (e.g., Cambridge Brass) purchased.

<p>DWQMS Reference Evidence</p> <p>Finding Summary</p>	<p>14. Review and Provision of Infrastructure</p> <p>PDS OP Element 14, QMS PROC 014 (rev.14, 10-Apr-2025), QMS FORM 026 Infrastructure Review Summary (rev.03, 29-Jan-2021) dated 11-Apr-2024</p> <p>Conforms</p> <p>QMS PROC 014, recently updated to reflect move from 20- to 10-Year Capital Forecast as per ECA, addresses proposed needs, being identified via Infrastructure Review Team meeting once per calendar year, lastly completed 10-Apr-2025. As per QMS LIST 006, there are actions from the 2023 (COMPLETED PRV 2023-AI-05 and OPEN -06, the latter addressed in Element 8 above), 2021 (IN PROGRESS 2021-BMP-01 valves / hydrants GPS), and 2020 (IN PROGRESS 2020-OFI-11 Operator WO software tablets) reviews, all rescheduled to 2026. Updates to the Forecast are reported to the Senior Management Team, led by the Chief Administrative Officer, for review and approval as part of the annual budget process before being presented to Council for approval with removed budgetary requests considered in future years.</p>
<p>DWQMS Reference Evidence</p> <p>Finding: Details</p> <p>Summary</p>	<p>15. Infrastructure Maintenance, Rehabilitation and Renewal</p> <p>PDS OP Element 15, Current Combined Water operations 2015-onward Spreadsheet (current to Nov-2025), QMS SOP 014 Watermain Valve Exercise and Inspection Program (rev.9, 1-Feb-2024) and 022 PRV Maintenance (rev.1, 10-Jul-2025)</p> <p>Opportunity for Improvement 2025-IA-OFI-05</p> <p><i>There is an opportunity to:</i></p> <ul style="list-style-type: none"> <i>i) add QMS LIST 014 Valve Quad 4 and QMS LIST 003 Hydrant updates to 2025-AI-08.</i> <i>ii) create an internal PRV maintenance form with inspection criteria documented in QMS SOP 022 and LIST 015 that also includes External Inspections comments / annual requirements.</i> <i>iii) split Dead End Blow Off Flushing QMS FORM 001 water usage and rate for non-process water tracking / audit purposes.</i> <p>OP Element 15 documents a summary of the OA's infrastructure maintenance, rehabilitation, and renewal programs. Key infrastructure maintenance and repairs are summarized within 'Current Combined Water Ops 2015 onward' spreadsheet in 'Maintenance Activities (2)'. The following maintenance was reviewed as per OP Element 15 with the SWW, ECA and all Operators:</p> <ul style="list-style-type: none"> • Annual Valve Maintenance was initiated for Quad 4 in November (refer to Element 12 for review of procedure with Operators) with the use of QMS LIST 014 spreadsheet (DRAFT rev.2) observed for 4-Nov-2025 and process reviewed with SWW, Operators and ECA. Each Quad is completed annually with all done in 4 years. • Annual Hydrant Maintenance is documented on QMS LIST 003 (rev.03) with repairs (e.g., folder observed for Quads 1 completed May-June, July-August 3 and a mix for top barrel replacement) documented within the Hydrant Maintenance and Inspection QMS FORM 002 for those with issues identified for all 4 Quads completed in 2025; repairs are completed as time allows with the goal of completing by next Hydrant Maintenance Season. • Annual and 5-Year PRV maintenance as per QMS LIST 015 PRV Inventory (rev.2, 10-Jul-2025), recently revised to update Effingham PRV model and size (from 150mm) and 2025 PRV#3 replacement or removal, annual

internally completed 6-Nov-2025 via a Work Order (*refer to Element 10 OFI*).

- **Monthly Watermain Pressure Testing** via Form QMS FORM 013 (rev.05) data is added to SWW Running Average Spreadsheet to monitor any trends while ensuring QMS FORM 003 (rev.6, 07-Feb-22) Portable Analog Pressure Gauge **Verification** is completed (*refer to Element 17 2025-IA-OFI-06*).
- **Semi-annual Dead End Blow Off Flushing QMS FORM 001** for Spring (April-May) and Fall (Oct-Nov) is complete for 2025.
- **Leak Detection** completed by Nichol 6-Oct-2025 for 6Km of water main with a focus on cast iron including 38 hydrants and conducted every couple of years with hydrant leak at #70 on Merritt Rd. fixed next morning by Operator documented on WO.

2025 **Watermain Break** Report QMS FORM 025 (rev.09, 01-Feb-24; *refer to Element 13 2025-IA-OFI-04*) was observed for 18/25-Jan involving cast iron (no associated capital projects are planned as per SWW as well as for break 10-Apr-2025); 10-Mar break involves Emmett capital project which is in the design stage as well as 18-Jul (observed in Logbook) related to Clare Regional project. **Watermain Commissioning - Town Checklist QMS FORM 012** (rev.10, 10-Jul-2025) which now addresses ORO/MPW sign off was not completed Jun/Aug-2025 (SWW intent as part of annual end of year form review) but signed Jan-2025. **Contractor Plan QMS FORM 010** was also reviewed. The maintenance program is communicated to the Owner through the budgeting process and the Annual Report, last carried and received [2025-02-19 via 10.2.2 2024 Pelham Water Distribution System Summary Report, 2025-0033-Public Works](#) as per the QMS LIST 006 DWQMS timeline tab. The SWW still retains responsibility for issuing daily WOs and tasks to OA personnel.

DWQMS Reference Evidence

16. Sampling, Testing and Monitoring

PDS OP Element 16, QMS PROC 016 (rev.15, 23-Jan-2025; reflected QMS FORM 008 trending as per 2023-OFI-34), QMS SOPs 010 THMs and HAAs (rev.9, 8-Feb-2022), QMS FORM 005 Drinking Water Advisory (DWA), Including Boiling Water (rev.1, 18-Feb-2022)

Finding Summary

Refer to 2025-IA-OFI-01 iii)

Lampman 2 Total Coliform 2025 **adverse** results thought to be laboratory error was reported 9-Oct and resolved 14-Oct via MECP Notice of Adverse Test Results and Issue Resolution Forms 2A and 2B. **2025 Semi-annual lead and alkalinity** sampling took place 3-Oct and 28-Mar; Running Annual Average 'THM RAA' and 'HAA RAA' tabs identify 18-Mar, 18-Jun- and 9-Sep sampling as per results folder via Chain of Custody.

QMS FORM 008 Chlorine Residual Sampling trending was presented as part of 2025 Review of Infrastructure (10-Apr-2025) and 2025 Management Review Year End Trend Presentation with no trends reported as per Operators aside from seasonal. The above program and associated results are communicated to Council through mandatory MECP **Annual Reports** available at <https://www.pelham.ca/en/living-here/water-and-wastewater-maintenance.aspx>, lastly 2025.

<p>DWQMS Reference Evidence Finding Details</p>	<p>17. Measurement & Recording Equipment Calibration and Maintenance PDS OP Element 17, QMS PROC 017 (rev.13, 24-Jan-2023) Opportunity for Improvement 2025-IA-OFI-06 <i>There is an opportunity to:</i> i) add the portable analog pressure gauge verification to QMS PROC 017. ii) revise QMS FORM 009 from 'Calibration' to 'Verification'.</p> <p>Summary QMS PROC 017 identifies the following equipment confirmed via the SCG Flowmetrix Water Quality Instrument Verification / Calibration Report dated 20-Jan-2025 with Instrument Tech Certification in place for D. Kettlewell:</p> <ul style="list-style-type: none"> • annual external 4 pocket colorimeters (#1 S/N 19060A000565 confirmed with Operators with same date sticker due Jan-2026) calibration (2025 documented on Water / Wastewater Work Order Form 27-Feb noting HR Colorimeter FOO92701 is out of service, 31-Mar, 30-Apr/May, 27-Jun, 1/29-Aug, 30-Sep and 31-Oct) • pH meters are verified prior to lead sampling (e.g., 28-Mar-2025) and purchased annually to ensure certification / calibration.
<p>DWQMS Reference Evidence</p> <p>Finding Summary</p>	<p>18. Emergency Management PDS OP Element 18, QMS LIST 002 Emergency Contacts (rev.7, 10-Jul-2025), QMS PROC 018 Emergency Management (rev.8, 10-Jul-2025), QMS PROC 025 Watermain Break (rev.10) Conforms A list of potential emergency situations have been documented in QMS PROC 018 (i.e., distribution system contamination, watermain break as per Element 15, and water quality advisory) which are all covered as part of emergency response exercises conducted every 3 years, lastly 14-Jul-2020 and 7-Dec-2023 (together with Awareness training), the latter focusing on PRVs, consistent with the QMS LIST 'DWQMS Timeline' tab. QMS LIST 002, recently revised together with QMS PROC 018 to reflect reversed ORO and Alternate MPW/SWW roles, also references the Niagara Region Emergency Contact List which included the Regional Contact met for a tour of the Chestnut booster station, Manager, Water System Maintenance.</p>
<p>DWQMS Reference Evidence</p> <p>Finding Summary</p>	<p>19. Internal Audits PDS OP Element 19, QMS PROC 019 (rev.8, 9-Oct-2018), 2024 Internal DWQMS Audit Report (Audit Date 13/14 November 2024, Report Date 26-Nov-2024) Conforms QMS PROC 019 documents an internal audit process that includes criteria, frequency, scope, methodology and record-keeping requirements, consideration of previous internal and external audit results, and describes how Corrective Actions are identified and initiated (i.e., QMS LIST 006 Corrective and Preventive Actions List). Internal audits have been completed by Tavares Group Consulting Inc. while ensuring independence from the activity being audited (e.g., auditing processes completed by others) with all DWQMS Elements subject to audit. The 2024 internal audit resulted in one [1] recurring and OPEN Opportunity for Improvement (OFI) 2024-OFI-41 identified related to Element 5 Document and Records Control. All 2023 OFIs in Elements 2, 5, 10, 15 and 16 are now COMPLETE. IN PROGRESS 2024-OFI-38 / (DWQMS)-02 external audit</p>

finding pertains to the process for the completion of the 36-month risk assessment to be completed in 2026.

DWQMS Reference
Evidence

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20. Management Review

PDS OP Element 20, QMS PROC 020 (rev.9, 9-Dec-2021), QMS FORM 027 Management Review Meeting Record (rev.01) dated 16-Nov-2023

Conforms

QMS PROC 020 documents a process for Management Review that incorporates the review and consideration of applicable Best Management Practices (BMPs; mostly recently those released by the MECP, scheduled to be reviewed in detail with Operators, MPW, SWW and ECA 4-Dec-2025), as required in DWQMS Element 21 (refer to **2021-BMP-01** in Element 14 above). Management Review was last completed 13-Nov-2025 with 14-Nov-2024 results communicated to the Owner with the Annual Summary Report (O. Reg. 170/03 Schedule 22) as outlined in Element 15 above. Action items identified as a result of Management Review are being tracked to completion via QMS LIST 006, e.g. **IN PROGRESS**:

- **2022-AI-01** to develop a backflow SOP with QMS SOP 023 Backflow Program (rev.0, 29-Feb-2024) issued and verification pending ECA use / review.
- **2024-BMP-03** to leverage the QMS Plan-Do-Check-Act process to drive the Town of Pelham's Sustainability Strategy through the 2025 Strategic Plan Review with a 1-Oct-2026 target date.

DWQMS Reference
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21. Continual Improvement

PDS OP Element 21, QMS LIST 006 (rev.6, 17-Nov-2022)

Conforms

OP Element 21 is implemented and conforms to QMS tracking and measuring of continual improvement:

- a. to review and consider applicable BMPs including recommendations from MECP (*refer to Element 20 directly above*), staff suggestions, association-wide best practices, external and internal audits, engineering, or contractor (e.g., maintenance) suggestions, etc. which have previously been reviewed as part of Management and Infrastructure (*refer to Element 14*) Reviews.
- b. for identification and management of QMS Corrective Actions (e.g., resulting from nonconformities associated with internal / external audits and MECP Inspection noncompliances) as per QMS PROC 019 that includes, within QMS LIST 006 for:
 - i) investigating the cause(s) of an identified non-conformity,
 - ii) documenting the action(s) that will be taken to correct and prevent the non-conformity from re-occurring, and
 - iii) reviewing the action(s) taken to correct and verifying that they are implemented and effective, done as part of this audit as summarized throughout this audit summary.
 - iv) identifying and implementing Preventive Actions (e.g., OFIs, actions identified during emergency response training/testing and from infrastructure and Management Reviews, MECP inspection recommendations [1 related to backflow from 2016, **2020-OFI-05** tower

etc.) to eliminate the occurrence of potential non-conformities that includes:

1. reviewing potential non-conformities that are identified to determine if preventive actions may be necessary,
2. documenting the outcome of the review, including the action(s), if any, that will be taken to prevent a non-conformity from occurring, and
3. reviewing the action(s) taken to prevent non-conformity, verifying that they are implemented and are effective in preventing its reoccurrence.

QMS LIST 006 is being regularly reviewed with the number of "in progress" items reduced for a **93% closure rate** as of 12-Nov-2025.



NSF International Strategic Registrations Audit Report

The Corporation of the Town of Pelham

20 Pelham Town Square Box 400
Fonthill, Ontario L0S 1E0 CAN

C0122277

Audit Type

Surveillance Audit

Auditor

James Pang

Standard

Ontario's Drinking Water Quality Management Standard Version 2
(Exp Date: 29-APR-2027)

Audit Date(s):

05/06/2025 - 05/06/2025

Recommendation

Ontario's Drinking Water Quality Management Standard Version 2 :



Executive Summary

Ontario's Drinking Water Quality Management Standard Version 2	QMS rep is well versed and committed to the DWQMS.
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Opportunities

Ontario's Drinking Water Quality Management Standard Version 2	None
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Corrective Action Requests

There is NO Corrective Action Request in this audit.	
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Site Information

The audit was based on a sampling of the company's management system.

Industry Codes

NACE:E 41

Scope of Registration

Ontario's Drinking Water Quality Management Standard Version 2 : Pelham Distribution System, 072-OA1, Entire Full Scope Accreditation



Opportunities for Improvements

General Information	
Operating Authority: Legal Name & Address	The Corporation of the Town of Pelham, 20 Pelham Town Square, Box 400 Fonthill, Ontario, Canada, L0S 1E0
Owner: Legal Name and Address	The Corporation of the Town of Pelham, 20 Pelham Town Square, Box 400 Fonthill, Ontario, Canada, L0S 1E0
Operating Authority Representative Information (Name, Title, Phone, Email & Address, if different from the OA Address)	Ryan Cook Manager of Public works T - 905 892 2607 x 362 rcook@pelham.ca
Accreditation Option	Full Scope - Entire DWQMS
List Drinking water system names and Population of the Subject System(s)	Pelham Drinking Water Distribution System - serving 14,050 residents
Activities:	Water distribution

Processes



Summary of Findings	
Requirement	Finding
1. Quality Management System	N/A
2. Quality Management System Policy	N/A
3. Commitment and Endorsement	C
4. Quality Management System Representative	C
5. Document and Record Control	N/A
6. Drinking-Water System	N/A
7. Risk Assessment	C
8. Risk Assessment Outcomes	C
9. Organizational Structure, Roles, Responsibilities, and Authorities	N/A
10. Competencies	N/A
11. Personnel Coverage	N/A
12. Communications	N/A
13. Essential Supplies and Services	N/A
14. Review and Provision of Infrastructure	C
15. Infrastructure Maintenance, Rehabilitation & Renewal	C
16. Sampling, Testing & Monitoring	N/A
17. Measurement & Recording Equipment, Calibration & Maintenance	N/A
18. Emergency Management	N/A
19. Internal Audits	C
20. Management Review	C
21. Continual Improvement	C
Mj	Major Non-Conformity. The auditor has determined one of the following: (a) a required element of the DWQMS has not been incorporated into a QMS; (b) a systemic problem with a QMS is evidenced by two or more minor conformities; or (c) a minor non-conformity identified in a corrective action request has not been remedied.
Mn	Minor Non-Conformity. In the opinion of the auditor, part of a required element of the DWQMS has not been incorporated satisfactorily into a QMS.
OFI	Opportunity for Improvement. Conforms to requirement, but there is opportunity for improvement.
C	Conforms to requirement.
	Not Applicable to this audit
*	Additional Comment added by auditor in the body of the report.



Verification of CARs For Ontario's Drinking Water Quality Management Standard Version 2

Have you verified the effectiveness of all previous CARs? (List all new CAR's that you initiated in this report because you did not verify effective implementation of a previous CAR)

N/A.

Discuss your evaluation in detail.

No CAR from the previous audit. .